DETAILED ACTION

Allowable Subject Matter

1. Claim 31 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

2. The following is an Examiner's statement of reasons for allowance, based upon the Examiner's understanding of the claims. These reasons for allowance should not be interpreted to imply that limitations not specifically mentioned are immaterial to patentability. The specific limitations identified below have been considered in combination with the entirety of the claim in determining patentability.

The prior art of record fails to disclose or fairly suggest a method as claimed, wherein a signal including a first identifier is input to a transmitter station and transmitted to a receiver where the signal causes the receiver to gather statistics on programming availability, use or usage.

Claim Objections

3. Claim 93 objected to because of the following informalities: There appears to be a typographical error "how to response to user responses" in line 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regard to claim 31, the limitations “selecting a portion of said signal” and “inputting said portion” in lines 15-16 are unclear. Lines 3-4 state that “said signal” causes the receiver to gather statistics, but lines 15-18 appear to specify that a “portion” of the signal causes the receiver to gather statistics. The claim should be amended to clarify how “said signal” and “said selected portion” relate to causing the receiver to gather statistics.

6. Claim 80 recites the limitation "said transmission schedule" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. With regard to claim 80, Lambert (US 4,381,522) discloses a method of processing signals in a system including a transmission station and a receiver station, said method comprising the steps of:

inputting a programming signal (programming signals are stored or available from external sources)(col. 34-42) and a comparison signal (identifier of selected program is received by the minicomputer)(col. 2, ll. 22-30 & 57-62) at said transmission

station, said comparison signal identifying program content of said programming signal (comparison signal identifies the program selected by the viewer)(col. 2, ll. 22-30);

inputting said transmission schedule at said transmission station (transmission schedules are stored at the transmission station)(col. 2, ll. 62-65), said transmission schedule comprising for each of said signals at least two of:

(1) a transmission time (programs are scheduled for delivery at a start time)(col. 2, ll. 65-68);

(2) an identifier for at least one of a transmission frequency and an output network (programs are assigned to a particular channel)(col. 2, ll. 65-68); and

(3) a signal identifier (schedule must contain an identifier of the program to be transmitted and also identifies a "schedule video signal" for transmission over the schedule channel)(col. 2, . 65 to col. 3, l. 1);

comparing said comparison signal to data from said transmission schedule (selection signal is used to select the appropriate program for transmission)(col. 2, ll. 62-68);

transmitting a transmission including said programming signal from said transmission station in accordance with said transmission schedule based on said step of comparing said comparison signal (selected program is provided at its scheduled time) (col. 3, ll. 1-18).

Lambert fails to disclose that said comparison signal is included in the transmission, programming the receiver station to store user data and select said signals on the basis of said user data, comparing information selected from said

transmission to said user data and receiving a portion of an information transmission at said receiver station based on said step of comparing.

Kruger (US 4,488,179) discloses a similar system for providing television signals to receivers via a broadcast network. Kruger teaches including a program identification signal as supplementary information in a television signal (col. 4, ll. 33-40). This would have been an advantageous addition to the system disclosed by Lambert since it would have allowed the receivers to identify the program and provide feedback to the user to ensure that it is the programming requested by the user.

Cogswell (US 4,331,974) discloses a similar system for providing television signals to receivers via a broadcast network. Cogswell teaches programming a receiver station to store user data (terminal specific address of the user's terminal)(col. 8, ll. 53-54) and select signals on the basis of the user data (receivers respond to their own address signal)(col. 6, ll. 50-57), comparing information received in a broadcast transmission with the user data (transmission contains information addressed to particular terminals, which is identified by the appropriate terminals)(col. 9, ll. 12-21 and 30-37) and receiving a portion of the transmission based on the comparison (substitute programs replace portions of the transmission as directed)(col. 9, ll. 48-51). This would have been an advantageous addition to the system disclosed by Lambert since it would have allowed programs to be supplemented with user specific substitute programming, permitting content to be targeted to user interests.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include program identification information in the

broadcast transmission to permit identification of the programming for verification purposes and to program the receivers with user data and use the user data to control receipt of portions of a broadcast transmission, in order to permit programming to be targeted to user interests.

8. With regard to claim 85, Cox (US 4,388,645) discloses a method of processing a plurality of signals in a system including a transmission station and a receiver station, wherein said receiver station is remote from said transmission station, said method comprising the steps of:

inputting said plurality of signals to said transmission station (headend receives programming guide from satellite)(col. 3, ll. 28-34);

inputting a transmission schedule associated with said plurality of signals (transmission schedule for programming guide is also included)(col. 4, ll. 28-32), said transmission schedule identifying a specific schedule for each of said plurality of signals (each page has an associated rebroadcast time)(col. 4, ll. 23-25), each said specific schedule designating for at least one of said plurality of signals at least two of:

(1) a transmission time (transmission time is specified)(col. 4, ll. 28-32);

(2) at least one of a transmission frequency and an output network; and

(3) an identifier (each page has an associated identifier to identify which page is transmitted at what time)(col. 4, ll. 23-32);

transmitting at least one of said plurality of signals in accordance with said transmission schedule (signals are transmitted at the appropriate time)(col. 4, ll. 58-63).

Cox fails to disclose that the receiver station is programmed to store user data or that the receiver stores at least one of the plurality of signals by identifying information in at least one of the plurality of signals associated with user data.

Kruger (US 4,488,179) discloses a similar system for transmitting television signals to a receiver over a broadcast network. Kruger teaches including supplemental information in a television signal to enable programming to be recorded on the basis of user data stored in a control unit (col. 4, ll. 33-51). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed television channels, including the schedule channel to be stored at the receiver if desired by the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include supplemental information in the television signals, including the scheduling channel, to permit the receiver to identify programming on the channel and record it in accordance with locally stored user data if desired.

9. With regard to claim 87, Cox (US 4,388,645) discloses a method of communicating a plurality of signals in a network, said network including a transmission station and a remote receiver station, said method comprising the steps of:

inputting said plurality of signals at said transmission station (headend receives programming guide from satellite)(col. 3, ll. 28-34);

inputting a communication schedule associated with said plurality of signals (transmission schedule for programming guide is also included)(col. 4, ll. 28-32), said

communication schedule designating for each signal of said plurality of signals at least two of:

(1) a transmission time (transmission time is specified)(col. 4, ll. 28-32);

(2) at least one of a transmission frequency and an output network; and

(3) a designation code (each page has an associated identifier to identify which page is transmitted at what time)(col. 4, ll. 23-32);

communicating each signal of said plurality of signals in accordance with said communication schedule (signals are transmitted at the appropriate time)(col. 4, ll. 58-63).

Cox fails to disclose inputting a portion of said plurality of signals to a computer, generating specific information content in response to said inputted portion of said plurality of signals and causing said receiver station to output said specific information content.

Summers (US 3,848,082) discloses a similar system for transmitting supplemental data in television signals. Summers teaches transmitting an embedded supplemental signal in a television program (col. 1, ll. 37-41; col. 4, ll. 56-64) and generating specific information in response to the signals for output at the receiver (col. 1, ll. 37-41). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed the programming guide information to be embedded in television signals already being sent to the receivers, eliminating the need to use a separate channel to transmit the programming guide. Cox further discloses that his system may be used with “any teletext-like" system that communicates “digitally

encoded data". Therefore, Summers falls within the scope of foreseeable systems that could interact with the Cox system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit embedded supplemental data signals in television programming with which the signals are associated and locally generate the programming guide for display at the receiver.

10. With regard to claim 88, Cox (US 4,388,645) discloses a method of generating information content in a network, said network including a transmission station and a receiver station, said receiver station being remote from said transmitter station, said method comprising the steps of:

inputting television programming and a control signal at said transmission station (headend receives programming and a programming guide from satellite)(col. 3, ll. 28-34);

inputting a schedule associated with said television programming (transmission schedule for programming guide, which is associated with television programming, is also included)(col. 4, ll. 28-32), said schedule designating at least two of:

(1) a transmission time (transmission time is specified)(col. 4, ll. 28-32);

(2) at least one of a transmission frequency and an output network; and

(3) an identifier (each page has an associated identifier to identify which page is transmitted at what time)(col. 4, ll. 23-32);

communicating said control signal from said transmission station in accordance with said schedule at a time when information content does not exist (signals are transmitted at the appropriate time)(col. 4, ll. 58-63).

Cox fails to disclose inputting said control signal to a computer at said receiver station, generating information content in response to said control signal, and causing a signal generator to add at least one of video and a graphic to said television programming at said receiver station.

Summers (US 3,848,082) discloses a similar system for transmitting supplemental data in television signals. Summers teaches transmitting an embedded supplemental signal in a television program (col. 1, ll. 37-41; col. 4, ll. 56-64) and generating specific information, including graphics (questions or coupons) (col. 6, l. 65 to col. 7, l. 16), in response to the signals (col. 1, ll. 37-41). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed the programming guide information to be embedded in television signals already being sent to the receivers, eliminating the need to use a separate channel to transmit the programming guide. Cox further discloses that his system may be used with “any teletext-like" system that communicates “digitally encoded data”. Therefore, Summers falls within the scope of foreseeable systems that could interact with the Cox system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit embedded supplemental data signals in television programming with which the signals are associated and locally generate the programming guide for display at the receiver.

11. With regard to claim 93, Cox (US 4,388,645) discloses a method of processing signals in a network including a transmitter station and a user station, said user station having a processor, said method comprising the steps of:

inputting a plurality of signals at said transmitter station (headend receives programming guide from satellite)(col. 3, ll. 28-34);

inputting a schedule associated with said plurality of signals (transmission schedule for programming guide is also included)(col. 4, ll. 28-32), said schedule including a designation for each of said plurality of signals of at least two of:

(1) a transmission time (transmission time is specified)(col. 4, ll. 28-32);

(2) at least one of a transmission frequency and an output network; and

(3) an identifier (each page has an associated identifier to identify which page is transmitted at what time)(col. 4, ll. 23-32);

communicating said one of said plurality of signals in accordance with said schedule (signals are transmitted at the appropriate time)(col. 4, ll. 58-63);

Cox fails to disclose communicating a programming signal and processor instruction instructing user stations how to response to user responses or inputting a user response to information included a said programming signal and processing said user response in accordance with said processor instruction.

Summers (US 3,848,082) discloses a similar system for transmitting supplemental data in television signals. Summers teaches transmitting an embedded supplemental signal in a television program (col. 1, ll. 37-41; col. 4, ll. 56-64) including

instructions on how to respond to user responses (col. 5, ll. 4-18), and processing user responses in accordance with the instruction (indicators are actuated in response to user responses)(col. 5, ll. 15-18). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed the programming guide information to be embedded in television signals already being sent to the receivers, eliminating the need to use a separate channel to transmit the programming guide and permitted user input to handled to permit user interaction with the guide. Cox further discloses that his system may be used with “any teletext-like" system that communicates “digitally encoded data”. Therefore, Summers falls within the scope of foreseeable systems that could interact with the Cox system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit embedded supplemental data signals in television programming with which the signals are associated and respond to user responses based upon instructions included in the embedded signals.

12. With regard to claim 98, Cox (US 4,388,645) discloses a method of processing a plurality of signals in a system, wherein said system includes a transmission station and a receiver station, said receiver station being remote from said transmitter station, said method comprising the steps of:

receiving at said transmission station said plurality of signals including multimedia signals, wherein said multimedia include programming in multiple formats

(headend receives traditional programming and a teletext encoded programming guide from satellite)(col. 3, ll. 21-34);

inputting said multimedia signals to a switch controlled by a processor at said transmission station;

controlling said switch to communicate said multimedia signals to said receiver station according to a schedule (signals are transmitted at the appropriate time)(col. 4, ll. 58-63).

Cox fails to disclose processing at said receiver station at least a first of said multimedia signals to generate a portion of a multimedia presentation and outputting a multimedia presentation including said generated portion and information content from at least a second of said multimedia signals.

Summers (US 3,848,082) discloses a similar system for transmitting supplemental data in television signals. Summers teaches transmitting an embedded supplemental signal in a television program (col. 1, ll. 37-41; col. 4, ll. 56-64) and using the signal to generate a multimedia presentation using information in multiple supplemental data signals (e.g., interactive coupon provisioning system combines display signals with answer processing signals)(col. 7, ll. 1-19). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed the programming guide information to be embedded in television signals already being sent to the receivers, eliminating the need to use a separate channel to transmit the programming guide and permitted user input to handled to permit user interaction with the guide. Cox further discloses that his system may be used with “any teletext-like"

system that communicates “digitally encoded data”. Therefore, Summers falls within the scope of foreseeable systems that could interact with the Cox system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit embedded supplemental data signals in television programming with which the signals are associated and respond to user responses based upon instructions included in the embedded signals.

13. With regard to claim 119, Cox (US 4,388,645) discloses a method of processing multimedia signals in a network including a transmission station and a receiver station, said receiver station having storage capacity for storing multimedia programming, said storage capacity including at least two of an optical disk player, a video recorder/player, and a computer, said method comprising:

receiving at said transmission station a plurality of signals, wherein at least two of said plurality of signals are multimedia signals (headend receives traditional programming and a teletext encoded programming guide from satellite)(col. 3, ll. 21-34), each of said multimedia signals including at least one of video (television programming), audio and data programming (program guide), said multimedia signals further including an embedded identifier (programming guide included embedded page numbers)(col. 4, ll. 3-7);

inputting said plurality of signals to a switch controlled by a processor at said transmission station;

identifying programming inputted to said switch;

controlling said switch to communicate said multimedia signals to said receiver station according to a schedule (signals are identified and transmitted at the appropriate time)(col. 4, ll. 58-63).

Cox fails to disclose storing information from at least one of said multimedia signals at said receiver station, communicating an instruct-to-coordinate signal to said receiver station, and presenting multimedia programming included in said multimedia signals at said receiver station at a specific time or a specific place in response to said instruct-to-coordinate signal.

Summers (US 3,848,082) discloses a similar system for transmitting supplemental data in television signals. Summers teaches transmitting an embedded supplemental signal in a television program (col. 1, ll. 37-41; col. 4, ll. 56-64), storing the information from the signals at the receiver (signals are stored for display), communicating an instruct-to-coordinate signal (code corresponding to a fire)(col. 7, ll. 28-30) that causes the receiver to present multimedia at a specific time and place in response to the signal (the code energizes the decoder and causes supplemental data from the signal to be immediately displayed on the television)(col. 7, ll. 30-32). This would have been an advantageous addition to the system disclosed by Cox since it would have allowed information to be transmitted in television signals in real-time, allowing users to access time sensitive information without delay. Cox further discloses that his system may be used with “any teletext-like" system that communicates “digitally encoded data”. Therefore, Summers falls within the scope of foreseeable systems that could interact with the Cox system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit embedded supplemental data signals in television programming to permit users to receive time sensitive information via their televisions.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON STRANGE whose telephone number is (571)272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.